

WHAT IS CLAIMED IS:

1. A plurality of storage systems comprising:

a first storage system including a first controller controlling a first write request received, and a first storage storing data under control by said first controller;

a second storage system including a second controller controlling a second write request received, and a second storage storing data under control by said second controller;

a third storage system connected to said first storage system and said second storage system, said third storage system comprises:

a third controller controlling data received from said first storage system synchronously and controlling data received from said second storage system synchronously, and

a third storage storing data under control by said third controller; and

a fourth storage system connected to said third storage system, said fourth storage system comprises:

a fourth controller controlling data received from said third storage system asynchronously, and

a fourth storage storing data under control by said fourth controller.

2. A plurality of storage systems according to claim 1, wherein said

first controller of said first storage system receives the first write request, sends a copy of data requested by the first write request to said third storage system, stores data requested by the first write request into said first storage, and receives an indication of completion of receipt of the copy of data

requested by the first write request from said third controller of said third storage system, and

wherein said third controller of said third storage system receives the copy of data requested by the first write request from said first storage controller of said first storage system, sends the indication of completion of receipt of the copy of data requested by the first write request to the first controller of said first storage system, and stores the copy of data requested by the first write request into said third storage.

3. A plurality of storage systems according to claim 2, wherein said first controller of said first storage system sends a copy of data requested by the first write request to said third storage system, after said first controller of said first storage system stores data requested by the first write request into said first storage.

4. A plurality of storage systems according to claim 2, wherein said third controller of said third storage system sends the indication of completion of receipt of the copy of data requested by the first write request to said first controller of said first storage system, after said third controller of said third storage system stores the copy of data requested by the first write request into said third storage.

5. A plurality of storage systems according to claim 2, wherein said first controller of said first storage system sends an indication of completion of processing, after said first controller of said first storage system receives the

indication of completion of receipt of the copy of data requested by the first write request from said third controller of said third storage.

6. A plurality of storage systems according to claim 1, wherein said second controller of said second storage system receives the second write request, sends a copy of data requested by the second write request to said third storage system, stores data requested by the second write request into said second storage, and receives an indication of completion of receipt of the copy of data requested by the second write request from said third controller of said third storage system, and

wherein said third controller of said third storage system receiving the copy of data requested by the second write request from said second storage controller of said second storage system, and sends the indication of completion of receipt of the copy of data requested by the second write request to the second controller of said second storage system, and stores the copy of data requested by the second write request into said third storage.

7. A plurality of storage systems according to claim 6, wherein said second controller of said second storage system sends a copy of data requested by the second write request to said third storage system, after said second controller of said second storage system stores data requested by the second write request into said second storage.

8. A plurality of storage systems according to claim 6, wherein said third controller of said third storage system sends the indication of completion

of receipt of the copy of data requested by the second write request to the second controller of said second storage system, after said third controller of said third storage system stores the copy of data requested by the second write request into said third storage.

9. A plurality of storage systems according to claim 6, wherein said second controller of said second storage system sends an indication of completion of processing, after said second controller of said second storage system receives the indication of completion of receipt of the copy of data requested by the second write request from said third controller of said third storage.

10. A plurality of storage systems according to claim 1, wherein said third controller of said third storage system receives data from said first storage system, sends a copy of data received from the first storage system to said fourth storage system, stores data received from the first storage system into said third storage, and receives an indication of completion of receipt of the copy of data received from the first storage system, from said fourth controller of said fourth storage system, and

wherein said fourth controller of said fourth storage system receives the copy of data received from the first storage system, from said third storage controller of said third storage system, sends an indication of completion of receipt of the copy of data received from the first storage system to the third controller of said third storage system, and stores the copy of data received from the first storage system into said fourth storage.

11. A plurality of storage systems according to claim 10, wherein said third controller of said third storage system sends a copy of data received from the first storage system to said fourth storage system, after said third controller of said third storage system stores data received from the first storage system into said third storage.

12. A plurality of storage systems according to claim 10, wherein said forth controller of said fourth storage system sends the indication of completion of receipt of the copy of data received from the first storage system to the third controller of said third storage system, after said forth controller of said fourth storage system stores the copy of data received from the first storage system into said fourth storage.

13. A plurality of storage systems according to claim 10, wherein said third controller of said third storage system stores data received from the first storage system into said third storage, asynchronously with said first controller of said first storage system sending an indication of completion of processing.

14. A plurality of storage systems according to claim 10, wherein said fourth controller of said fourth storage system stores the copy of data received from the first storage system into said forth storage, asynchronously with said first controller of said first storage system sending an indication of completion of processing.

15. A plurality of storage systems according to claim 10, wherein said third controller of said third storage system receives data from said second storage system, sends a copy of data received from the second storage system to said fourth storage system, stores data received from the second storage system into said third storage, and receives an indication of completion of receipt of the copy of data received from the second storage system, from said fourth controller of said fourth storage system, and

wherein said fourth controller of said fourth storage system receives the copy of data received from the second storage system, from said third storage controller of said third storage system, and send an indication of completion of receipt of the copy of data received from the second storage system to the third controller of said third storage system, and stores the copy of data received from the second storage system into said fourth storage.

16. A plurality of storage systems according to claim 15, wherein said third controller of said third storage system sends a copy of data received from the second storage system to said fourth storage system, after said third controller of said third storage system stores data received from the second storage system into said third storage.

17. A plurality of storage systems according to claim 15, wherein said fourth controller of said forth storage system sends the indication of completion of receipt of the copy of data received from the second storage system to the third controller of said third storage system, after said fourth

controller of said fourth storage system stores the copy of data received from the second storage system into said fourth storage.

18. A plurality of storage systems according to claim 15, wherein said third controller of said third storage system stores data received from the second storage system into said third storage, asynchronously with said second controller of said second storage system sending of an indication of completion of processing.

19. A plurality of storage systems according to claim 15, wherein said fourth controller of said fourth storage system stores the copy of data received from the second storage system into said fourth storage, asynchronously with said second controller of said second storage system sending of an indication of completion of processing.